UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN

NATIONAL GRAPHICS, INC.,

Plaintiff,

v. Case No. 12-C-1119

BRAX LTD, et al.,

Defendants.

DECISION AND ORDER

The parties in this infringement action have filed cross motions for summary judgment. The Plaintiff seeks summary judgment as to both validity and infringement, while the Defendants' motion limits itself to validity. This court previously addressed the patents in an April 24, 2014 Decision and Order addressing claim construction as well as validity and infringement of some of the claims. For the reasons given below, the motions for summary judgment will be denied in most respects.

I. Analysis

Summary judgment is proper "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c). Summary judgment of infringement or non-infringement can only be granted if, after viewing the alleged facts in the light most favorable to the non-movant, there is no genuine issue whether the accused device is encompassed by the claims. Fed.R.Civ.P. 56(c); *Pitney Bowes, Inc. v. Hewlett-Packard Co.,* 182

F.3d 1298, 1304 (Fed. Cir. 1999). As for validity, because patents are presumed valid, "a moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of facts underlying invalidity that no reasonable jury could find otherwise." *SRAM Corp. v. AD–II Eng'g, Inc.,* 465 F.3d 1351, 1357 (Fed. Cir. 2006).

II. Corresponding Patents

A. Validity

As relevant here, the '185 patent teaches a method of producing a corresponding lenticular image comprising the steps of:

> providing an output device in connection with a computer;
> receiving into the computer memory an interlaced image file;
> converting the interlaced image file into an output having an output resolution;
> varying the resolution of the output to define a varied output resolution;
> and creating a corresponding lenticular image using the output at the varied output resolution;
> wherein the varying is accomplished using a Mainscale Scan Adjustment ("MSA") clock.

(ECF No. 156-5.)

"While the ultimate question of patent validity is one of law, there are a number of underlying inquiries that raise questions of fact. In addition to obviousness, these include anticipation, [and] prior public use or sale." *Markman v. Westview Instruments, Inc.,* 52 F.3d 967, 989 n.1 (Fed. Cir. 1995) aff'd, 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996).

The Defendants argue that claim 1 of the '185 patent is invalid as obvious and / or anticipated by prior art. The Defendants' expert, David Roberts, reviewed the patents and the prior art and concluded that correspondence between the resolution of the interlaced image and the pitch of the lenticular lens was well known in the art, and it was also well known that variable resolution output devices could produce correspondence. In addition, he opined that NGI's previous use of

something called a Hell Scanner, and its more recent use of a Kodak Trendsetter, performed essentially the same function as its patented technology did. In short, he believes it would have been obvious to one skilled in the art to vary the resolution of variable output devices to produce a corresponding lenticular image, and in fact that is exactly what NGI had been doing itself for years prior to its patent application.

1. Prior Use

Before reaching the merits of the dispute, I must address NGI's arguments as to why the merits of the Defendants' prior use defense should not even be reached.

a. Summary Judgment Already Granted

NGI first argues that this court already granted summary judgment on the prior use defense, concluding that the Defendants had failed to produce sufficient evidence to allow a jury to find in their favor on it. Accordingly, it argues that the present round of summary judgment briefing was not an opportunity to re-litigate that issue. The Defendants respond, however, that the previous summary judgment motion was filed by NGI at a much earlier stage of discovery. They cannot be faulted, they argue, for the fact that the evidence was not fully developed at that time.

I am satisfied that, given the somewhat unusual circumstances of this case, the better practice is to reach the merits rather than become bogged down in procedural details, particularly when no suggestion of prejudice has been raised. The fact is that the evidence upon which the Defendants now rely had not been fully available in 2014, and the previous ruling came in the context of claim construction and partial summary judgment motion filed by NGI, a motion that did not give the Defendants a full opportunity to advance their defenses.

b. Public Use of Trendsetter

Under 35 U.S.C. § 102(b), "[a] person shall be entitled to a patent unless ... the invention was in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States...." 35 U.S.C. § 102(b).

> We look to the totality of the circumstances when evaluating whether there has been a public use within the meaning of section 102(b). The totality of the circumstances is considered in conjunction with the policies underlying the public use bar. The circumstances may include: the nature of the activity that occurred in public; the public access to and knowledge of the public use; whether there was any confidentiality obligation imposed on persons who observed the use; whether persons other than the inventor performed the testing; the number of tests; the length of the test period in relation to tests of similar devices; and whether the inventor received payment for the testing.

Netscape Commc'ns Corp. v. Konrad, 295 F.3d 1315, 1320 (Fed. Cir. 2002) (citations omitted).

NGI argues that the Creo/Kodak Trendsetter was not used "publicly" because the third party who used it (a company called Travel Tags) was using it in a confidential and propriety fashion, not shared with anyone outside of that company except under a non-disclosure agreement. The Defendants respond that although confidentiality might be an exception to the "on sale" bar on patentability, 35 U.S.C.A. § 102(a)(1), it is not an exception to the public use bar, which is the defense the Defendants are relying on. That is, even if the third party took steps to keep its use of the Trendsetter private, that would not render that use a non-public use. The point of the public use bar is to prevent B from patenting a product or method that A had already been using, and thus it does not matter whether A kept its own use a secret. "Public" does not mean the use had to be openly known, but merely that the use was by someone other than the inventor or his agents.

> Public use includes "any use of [the claimed] invention by a person other than the inventor who is under no limitation, restriction or obligation of secrecy to the inventor." "The public use bar serves the policies of the patent system, for it encourages prompt filing of patent applications after inventions have been completed and publicly used, and sets an outer limit to the term of exclusivity."

Netscape Commc'ns Corp. v. Konrad, 295 F.3d 1315, 1320 (Fed. Cir. 2002) (citations omitted).

Netscape does not stand for the proposition that a completely private use by a third party could be viewed as an invalidating "public use," however. "[W]hen an asserted prior use is not that of the applicant, § 102(b) is not a bar when that prior use or knowledge is not available to the public." *Woodland Trust v. Flowertree Nursery, Inc.,* 148 F.3d 1368, 1371 (Fed. Cir. 1998). In *W.L. Gore & Associates, Inc. v. Garlock, Inc.,* for example, the court found no public use when the claimed invention was used by third parties pursuant to a confidentiality agreement. 721 F.2d 1540, 1550 (Fed. Cir. 1983) ("It was error to hold that Budd's activity with the Cropper machine . . . was a "public" use of the processes claimed in the '566 patent, that activity having been secret, not public.") And in *Baxter Int'l, Inc. v. COBE Labs., Inc.,* the court found that a lack of confidentiality was crucial to its finding of a public use. 88 F.3d 1054, 1059 (Fed. Cir. 1996) ("Suaudeau's lack of effort to maintain the centrifuge as confidential coupled with the free flow into his laboratory of people . . . who observed the centrifuge in operation and who were under no duty of confidentiality supports only one conclusion: that the centrifuge was in public use.") The court went on to find that, "[a]s between a prior inventor who benefits from a process by selling its product but suppresses, conceals, or otherwise keeps the process from the public, and a later inventor who promptly files a patent application from which the public will gain a disclosure of the process, the law favors the latter." *Id.*

Here, Travel Tags' Rule 30(b)(6) witness testified that his company considered its process to be confidential, and did not disclose it to customers or third parties, except possibly when a non-disclosure agreement would govern. (ECF No. 167-4 at 121-122.) That evidence is unrebutted. Accordingly, I must conclude that Travel Tags' confidential prior use was not an invalidating public

use under § 102(b).

c. Public Use of Hell Scanner

The Defendants also argue that NGI's own use of a Hell Scanner in the years prior to its application constitutes an invalidating public use. Their expert, David Roberts, opined that the Hell Scanner, a precursor to the Kodak Trendsetter, did exactly the same thing that the Trendsetter did. NGI used a Hell Scanner, a variable resolution device, to make corresponding lenticular images, and the patentee, Goggins, admitted that NGI was able to vary the resolution of the lenticular images in the mainscan and subscan directions to make corresponding lenticular images. (ECF No. 149 at ¶¶ 5-8.) The Defendants argue that what NGI did was tantamount to replacing a black-and-white printer for a color printer.

The Defendants might ultimately be proven right, but at this stage there is not enough evidence to grant summary judgment in their favor, particularly given the presumption of validity that NGI enjoys. NGI notes that the details of its use of the Hell Scanner are not in the record, and neither is the process by which the scanner uses a timing device to vary resolution. Although Goggins testified that the scanner used a timing device, his brief testimony on the subject, which is the basis for Roberts' opinion, is not sufficient to supply the clear and convincing evidence needed to invalidate a patent. (ECF No. 151-45 at 60-62.) Moreover, Roberts' supplemental report concludes in only a conclusory fashion that the Hell scanner would be a public use. If anything, his report suggests that it was the transition from the Hell scanner to the Trendsetter—not NGI's use the Hell scanner itself—that NGI attempted to patent. (ECF No. 149 at ¶ 7.) Based on the sparse record now before me, I cannot find clear and convincing evidence of public use based on the Hell scanner.

2. Roberts' Analysis of Prior Art and Obviousness

As stated earlier, the Defendants' expert, David Roberts, has opined that none of the technology set forth in the Corresponding Patents is novel. In a nineteen-page declaration, he explains, with citations to prior art, his view that each of the five independent claims of the '185 patent were known in the prior art. (ECF No. 148.)

To recall, Claims 1-25 of the '185 patent require "varying the resolution of the output to define a varied output resolution" wherein "the varying is accomplished using a Mainscale Scan Adjustment ("MSA") clock." The resolution is varied by a clock by virtue of the fact that the image is being exposed on a plate attached to a rotating drum. The MSA clock allows the rate of exposure to be changed, which results in a change in the pixel resolution. As the specification explains,

> Timing is critical to the proper exposure of plate 32, which is accomplished by the movement of drum 30 carrying the plate relative the movement of exposure element 34. Proper timing necessitates the use of time-keeping element(s) (e.g., at least one clock, and typically at least two or more clocks). One such clock is a Mainscale Scan Adjustment ("MSA"). Adjusting the MSA permits the control and fine tuning of the timing of image creation on the plate secured to the drum of the output device. Stated another way, the MSA changes the rate at which exposure of the plate occurs, resulting in a change in image size.

(ECF No. 156-5,'185 patent, 11:65-12:8.)

Using a clock to change the resolution allows each "slice" of a lenticular image to correspond to the lenticule, i.e., to be aligned with it. One of the keys of the invention is that the clock can allow "varying the resolution of the output to define a varied output resolution" (*Id.* at 18:32) meaning that the resolution in one direction can be different than in another. That is, use of the clock allows stretching or shrinking the resolution in one direction to align the slices under the lenticules.

A determination that a claim is invalid as being anticipated under 35 U.S.C. § 102 requires that the party arguing for invalidity prove by clear and convincing evidence that "each and every limitation is found either expressly or inherently in a single prior art reference." *Oakley, Inc. v. Sunglass Hut Int'l.,* 316 F.3d 1331, 1339 (Fed.Cir. 2003) (quoting *Celeritas Techs. Inc. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1360 (Fed.Cir. 1998)). NGI brushes off the Defendants' invalidity argument as conclusory and unsupported, but Roberts' report includes numerous citations to prior art and uses a limitation-by-limitation analysis to conclude that all of the patents' teachings would have been either known or obvious to one skilled in the art, which he defined as someone having five years' experience in lenticular print production. (ECF No. 148 at ¶ 20.) Thus, the report is not the kind of cursory effort that other courts have found wholly insufficient. *See., e.g., Motorola Mobility, LLC v. Int'l Trade Comm'n,* 737F.3d 1345, 1350 (Fed. Cir. 2013).

I agree with NGI, however, that the Defendants' invalidity argument does not suffice to meet the standard of clear and convincing evidence. To fully credit Roberts' conclusions, a court would need more in the way of explanation than the Defendants have provided. *Schumer v. Lab. Computer Sys., Inc.,* 308 F.3d 1304, 1316 (Fed. Cir. 2002) (expert report insufficient when it "merely sets forth his understanding of the operation and steps performed by the Seiko driver and describes what he considered to be known to one of ordinary skill prior to Schumer's invention.") For example, one of the key teachings of the patents is the use of one or more clocks to achieve a change in resolution, and Roberts explains that two prior art patents discuss the use of clocks or timing devices. (*Id.* at ¶¶ 33, 64.) But his explanation is quite limited. It may be true that the Morton patent ('478) he cites uses a timing device in some respect, but he does not explain in any detail how they achieve the same results achieved by the patents in suit, or how the clocks in such devices mimic or equate to

the mainscale scan adjustment (MSA) clocks set forth in the patents, which, the specification explains, allows for "the control and fine tuning of the timing of image creation on the plate secured to the drum of the output device." (ECF No. 156-5,'185 patent, 12:4-7.) In fact, it does not appear that the Morton patent uses a clock (much less an MSA clock) to adjust the resolution at all; instead, alignment is obtained by movement of the imaging head. Its specification does briefly discuss how a stepper motor controlled printer uses a clock and pulses, but it is not apparent from Roberts' declaration or the patent itself how that would anticipate or render obvious the use of an MSA clock. (ECF No. 141-5; '478 patent, 10:25-45.) Similarly, although the Syracuse patent ('225) discloses the use of a stepper motor and clock, it does not disclose the use of an MSA clock. (ECF No. 141-6, '225 patent, 8:9-30.)

A related problem is that the report does not explain in any depth how a person skilled in the art would have known to combine the various prior art references into the invention described in the patents in suit. A party seeking to invalidate a patent on the basis of obviousness or anticipation must demonstrate "by clear and convincing evidence that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so." *Procter & Gamble Co. v. Teva Pharm. USA, Inc.,* 566 F.3d 989, 994 (Fed.Cir. 2009) (quoting *Pfizer, Inc. v. Apotex, Inc.,* 480 F.3d 1348, 1361 (Fed.Cir. 2007)). In short, the report does not provide clear and convincing evidence of invalidity.

In sum, NGI is incorrect that Roberts' report is the sort of half-hearted effort that can be easily dismissed. But neither is the report sufficient, on its own, to overcome the presumption of validity.

B. Infringement

The Defendants use Kodak's VMR technology. This court's previous summary judgment ruling explained the state of knowledge at the time the motion was filed:

> Defendants input a resolution for the image on a computer screen and the machine outputs a plate at that resolution. Is it possible that the Kodak VMR varies resolution using the MSA clock or some other time-keeping element? Certainly, as the mainscale scan adjustment is a feature of the current Kodak VMR. But Defendants do not know—neither does Plaintiff for that matter—whether varying the MSA clock is *the* method. . . . [T]here has been no discovery on this issue to date.

(ECF No. 88 at 27.)

Now that discovery has been conducted, it appears clear that the VMR process does use an MSA clock. Consequently, the Defendants have pivoted, now arguing that the VMR process they use does not infringe because the VMR software does not practice the step of "varying the resolution of the output to define a varied output resolution." (ECF No. 156-5, '185 patent, 18:32-34.) Instead, the program simply converts directly to the specified output resolution, skipping the step of "varying" the resolution. "With VMR, you simply convert the image file to the final resolution and omit the step of varying it thereafter." (ECF No. 159-1 at 6.)

In response, NGI focuses on what it calls "Option B," which is required to be used for resolutions that have a decimal, i.e., that are not a whole number. As Kodak's Fowler testified, the VMR option is a "dumbed down" way to make a MSCA adjustment, varying the clock that controls the timing of the laser delivering signals to the plate. (ECF No. 169-5 at 162-63.) This process uses the clock to vary the output resolution of the image file. The central requirement of the claim term is that the resolution of the output be varied, and this happens in the Defendants' process, even if there is not a specific output file reflecting that step.

The Defendants' argument appears to be premised on the fact that they do not produce some kind of interim output file during the process. At oral argument, they emphasized the fact that their process does not use two steps, i.e., that there is no "second" variance of the resolution as a discrete step in their process. The premise of this argument is faulty, however. The claim terms do not require variance as a separate and discrete "step." Instead, the claim requires that the output resolution is "varied," for example, by converting an image from 2400 dpi to, say, 2398.5 dpi, a "varied" or different resolution, so as to achieve correspondence. This is a process practiced by the Defendants. The fact that the Defendants might use the VMR option to vary the resolution *directly*, or at the outset, does not mean the output is not varied, which is all the claim terms require. Accordingly, NGI is entitled to summary judgment on the question of infringement.

III. In-Mold Patents

The '196 patent describes "Molded Articles Having a Surface Bearing a Lenticular Image." The stated purpose of the invention is to provide a means of promoting the integrity of the lenticular image and the image's adhesion to the molded article. (ECF No. 59-2, '196 patent, 2:10-15.)

A. Infringement

NGI has moved for summary judgment of infringement. The parties are in agreement that Dynamic Drinkware, the only alleged infringer, infringes many of the limitations in Claim 1 of the '196 patent. The contention is over Step C, which provides:

> introducing a molten plastic into the mold cavity having the lenticular image therein to form the molded article with the lenticular image attached thereto, the molten plastic introduced at least one of a temperature, a pressure, and a turbulence that minimizes any distortion to the lenticular lens and any degradation to the interlaced image.

(*Id.* at 10:43-49.)

In response, Dynamic Drinkware argues it does not infringe because the process it uses employs a protective coating to achieve the same end, rather than the "temperature, pressure, and a turbulence" described in the claims. It cites an experiment in which its employee made several plastic cups, with some having the protective layer and others lacking it. The cups without the layer delaminated, and the lenticular image was degraded by the molding process. In contrast, the cup made with its traditional method, using the protective layer, were successfully molded. This shows, it argues, that the results are achieved by virtue of the protective layer and not some other factor. "[A]s opposed to temperature, pressure and turbulence control being used to minimize distortion to the lens and degradation to the interlaced image, Dynamic's method employs a thermally protective layer." (ECF No. 159-1 at 19.)

Plaintiff responds by citing this court's claim construction decision. There, the Defendants had attempted to limit the term "temperature, pressure, and turbulence" by incorporating a limitation into the definition that would exclude "the need for a protective coating" from the process. (ECF No. 88 at 11.) In other words, the Defendants wanted to use the court's claim construction to carve out their own use of a protective layer. I rejected the effort, finding that the use of a protective layer did not, *ipso facto*, take the process outside of the claim terms. The patent allowed for the use of a protective layer, I found, and so it would not make sense to conclude that the claim terms excluded use of a layer. NGI thus believes the Defendants' current argument is nothing more than a re-argument of an issue that has already been decided.

NGI relies too heavily on the claim construction, however. It is true that the use of a protective layer does not automatically exclude the contested process from the scope of the claim terms. Some techniques might infringe even if they use a protective layer, and so NGI is correct that

the use of a protective layer is not, in and of itself, a defense. But it is equally true that the use of a protective layer is not something taught by the claim terms themselves. In other words, the fact that protective layers are not excluded does not mean that they are somehow incorporated into the claims of the '196 patent. As I found in the decision on claim construction, the claims are simply silent on protective layers—they may be used, or not used, without affecting the scope of the claim terms. Thus, although someone may infringe even though his process uses a protective layer, it is just as conceivable that a process could use a protective layer and *not* infringe the '196 patent. In sum, though the use of a protective layer is not a get-out-of-jail-free card for the Defendants, neither is it dispositive of the infringement question.

In fact, despite NGI's apparent belief to the contrary, the use of a protective layer is highly relevant to the question of how the Defendants' process achieves its ends. That is, if the protective layer were the sole or principal means of minimizing distortion and degradation, then that would undermine NGI's claim that the Defendants' process uses a temperature, pressure or turbulence to achieve those same aims. Dynamic Drinkware's point is not just that its process *uses* a protective layer, but that it is the protective layer that achieves the desired result *instead of* the "temperature, pressure, and turbulence" described in the patent. Keeping everything else the same, when the layer is not used during the process, it results in delamination and visual degradation, as well as damage to the lenticular lenses themselves. Thus, it cannot be said that distortion or degradation are minimized at all, much less through "temperature, pressure, and a turbulence."

NGI responds that Dynamic Drinkware's evidence about its experiment, as well as the testimony of Jeff Slusarski, its Rule 30(b)(6) witness, should be disregarded because they constitute expert testimony and needed an expert report pursuant to Fed. R. Civ. P. 26(a)(2). That rule

requires reports from those experts who were (1) "retained or specially employed to provide expert testimony;" or (2) "whose duties as the party's employee regularly involve giving expert testimony." Fed. R. Civ. P. 26(a)(2)(B). Here, Slusarski was Dynamic Drinkware's employee, the man in charge of its cup-making operations, and thus the Defendants argue he was not "retained or specially employed" as an expert.

The first question is whether the testimony in question constitutes "expert" testimony at all. As an employee with technical knowledge, some of Slusarski's testimony naturally falls within the realm of what would normally be considered the testimony of an expert. But the essence of his testimony is based on his personal knowledge as a witness, based on his experience and training. He has conducted an experiment, it is true, but the experiment was simply reflective of a process he has been involved in for a long time, and its results are the kinds of things he has witnessed during his career. In short, it is doubtful that most of Slusarski's testimony is "expert" testimony at all.

Assuming that his testimony *is* expert testimony, however, NGI argues that the mere fact that Slusarski is an employee should not exempt him from complying with the rules governing experts. Some courts have agreed with NGI's position. For example, one magistrate judge concluded that "[t]he logic of defendant's position would be to create a category of expert trial witness for whom no written disclosure is required—a result plainly not contemplated by the drafters of the current version of the rules and not justified by any articulable policy." *Day v. Consol. Rail Corp.,* 1996 WL 257654, at *2 (S.D.N.Y. May 15, 1996). Slusarski is not testifying merely with respect to factual matters he has perceived as a layman during the course of his employment or studies. Instead, he has conducted a novel experiment, designed solely for this litigation, attempting to

demonstrate the efficacy of various methods of producing molded cups. NGI therefore believes that to the extent Slusarski's testimony is expert testimony, he was "specially employed" to conduct that experiment and to provide that testimony, Fed. R. Civ. P. 26(a)(2)(B), because he was conducting tests and developing opinions on behalf of his employer outside the normal duties of his job.

But to conclude an expert report was required would be to ignore the plain language of the rule. The rule requires reports for employees who "regularly" give expert testimony as part of their duties. Fed. R. Civ. P. 26(a)(2)(B). By implication, those employees who do *not* regularly give expert testimony are excluded from the rule's reach. *Greenshaw v. City of Cedar Rapids, Iowa,* 255 F.R.D. 484, 487-88 (N. D. Iowa 2009) (citing cases). "If the drafters had intended to impose a report obligation on all employee-experts, they could have and would have done so." *Navajo Nation v. Norris,* 189 F.R.D. 610, 613 (E.D. Wash. 1999). Instead, the plain implication of the rule, as written, is that employees need not provide a report unless their regular duties involve providing expert testimony. Here, no one argues that Slusarski has regularly provided expert testimony in litigation.

NGI also argues that even if the court considers Slusarski's testimony, it is irrelevant because Slusarski's experiment did not use the same process that Dynamic Drinkware uses. Although part of the video shows the use of Dynamic Drinkware's protective layer, the rest of the experiment is devoted to demonstrating the making of cups that did not use such layers, a process it does not even employ in its normal practice. In short, NGI believes the demonstration of a process the Defendants do not use is irrelevant.

But, as noted above, the point of the experiment is to suggest that it is the protective layer, and not something else, that achieves the desired goals. Although Slusarski's experiment and

testimony are certainly not dispositive of the issue (which the Defendants recognize), they are enough to create a genuine issue of material fact because they give a plausible explanation for how the contested process achieves the desired ends without infringing on the patent's limitations. The Plaintiff's motion for summary judgment of infringement will therefore be denied.[1]

B. Invalidity of the '196 patent

1. Written Description

The Defendants first argue that the '196 patent fails the written description requirement. As the Federal Circuit has explained,

> the description must "clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed." In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date. . . .
> whatever the specific articulation, the test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed.

Ariad Pharm., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (citations omitted).

The essence of the Defendants' argument is that by failing to disclose *how* the temperature, pressure or turbulence minimizes distortion, the patent begs the very question it purports to solve. The patent does not, for example, disclose *what* temperature should be used, apart from general instructions based on information available publicly or known in the art. The specification teaches that the "temperature and pressure are sufficient to ensure proper formation of the molded part

[1]The fact that Slusarski's testimony might be at odds with a Product Requirements sheet (ECF No. 141-9) is evidence that a jury can consider in evaluating the testimony. It does not mean his testimony should be excluded.

without distortion of the lenticular image" (6:65-67) and "the temperature and pressure experienced by the surface of the lenticular image exposed to the plastic . . . is sufficiently below that at which the surface deteriorates or otherwise degrades." (7:4-7.) But these generic directives simply instruct the public to accomplish the patent's stated goal (preventing distortion or degradation) by using such temperatures and pressures that will accomplish that task. They do not say *how* to do it. This at least suggests that the inventor was not in possession of the actual invention, i.e., that he had not actually reduced it to practice.

The Defendants rely on the testimony of their expert, David Outlaw, who has 40 years of experience in the field of injection molding. Outlaw concluded that there were several omissions in the disclosures of the '196 patent. For instance, the patent does not discuss how the lenticular insert bonds with the molten plastic. NGI argues, however, that Outlaw did not fully understand what the written description requirement meant. Although his report suggests that a person of ordinary skill in the art would not be able to understand and practice the patent, he testified in his deposition that someone could practice the claims if they used their knowledge in conjunction with the patent's disclosures. (ECF No. 163-15 at 139:16-22.) In truth, Outlaw's testimony is not particularly clear on the point. He did made clear his belief that it would require "undue trial and error" for someone skilled in the art to practice the teachings of the patent, and thus he did not believe the invention had been sufficiently disclosed. (*Id.* at 139:2-15.) His subsequent, brief statement that someone skilled in the art could practice the patent must be read in that context; as such, it does not provide sufficiently clear evidence to conclude that Outlaw failed to understand the written description or enablement requirements. Instead, his declaration makes clear that he understands that the purpose of the written description requirement is to demonstrate that the

applicant actually invented what is claimed. (ECF No. 147, ¶ 8.)

Of course, the important issue is not the expert's understanding of the law, but what his expert opinion was regarding the substance of what the patent disclosed. The essence of Outlaw's opinion is that the patent did not disclose a range of acceptable molding temperatures or pressure to be used to achieve the desired result. (ECF No. 147, ¶ 18-22, 29.) Outlaw's report is brief, and certainly does not warrant judgment in favor of the Defendants. But his opinions do suffice to create a genuine issue of material fact, precluding summary judgment for NGI. With further explanation, a jury could conclude that the patent does not convey to those skilled in the art that the inventor had possession of the claimed subject matter. "Compliance with the written description requirement is essentially a fact-based inquiry that will 'necessarily vary depending on the nature of the invention claimed.'" *Enzo Biochem, Inc. v. Gen-Probe Inc.,* 323 F.3d 956, 963 (Fed. Cir. 2002) (citation omitted). Accordingly, summary judgment will be denied to both sides.

The Defendants also argue that in 2003, when the inventor was employed by NGI, he stated that "the flood coating layer of National Graphics, Inc. in-mold lenticular does not provide protection, thermal or otherwise, to the four-color image of the insert." (ECF No. 151-13 at ¶ 6.) Elsewhere, he explained that one purpose of the invention was to eliminate the extraneous step of applying a protective substrate to the ink layer. The upshot of this, the Defendants claim, is that NGI actually claimed an invention broader than that which it actually invented.

NGI notes, however, that evaluation of the written description is based on the four corners of the specification, not what an inventor might have said about the invention. Indeed, it is an objective inquiry, which means it is not based upon what people say or think about the scope of the patent. "When determining whether a specification contains adequate written description, one must

make an 'objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art.'" *Boston Scientific Corp. v. Johnson & Johnson,* 647 F.3d 1353, 1366 (Fed. Cir. 2011) (citation omitted). Accordingly, I cannot conclude that the other factors the Defendants cite support its invalidity position.

2. Enablement

Similarly, the Defendants argue that the specification of the '196 patent does not contain enough information to teach a person of ordinary skill in the art how to make and use the invention. The specification must be "enabling," which means "the specification shall contain a written description of the invention, and the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same." 35 U.S.C. § 112, ¶ 1. "To be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without 'undue experimentation.' " *MagSil Corp. v. Hitachi Global Storage Technologies, Inc.,* 687 F.3d 1377, 1380 (Fed. Cir. 2012) (citation omitted); *Minnesota Mining and Manufacturing Co. v. Chemque, Inc.,* 303 F.3d 1294, 1301 (Fed. Cir. 2002). "Whether undue experimentation would have been required to make and use an invention, and thus whether a disclosure is enabling under 35 U.S.C. § 112, ¶ 1, is a question of law that we review de novo, based on underlying factual inquiries that we review for clear error." *Enzo Biochem, Inc. v. Calgene, Inc.,* 188 F.3d 1362, 1369 (Fed. Cir. 1999).

As an example of the patent's alleged failure to enable, Defendants argue that the specification mentions polypropylene as a possible usable material, but that it fails to discuss the bonding between the lenticular insert and the molten plastic, a point that *is* taught in the Guest and

Raymond patents. One skilled in the art would have required significant trial-and-error to uncover how to make a lenticular cup out of polypropylene, they argue, and thus the patent would require undue experimentation. NGI responds that the use of polypropylene was just one application of the patent, and in any event the patent discloses a means of "improved adhesion between the molten plastic and the lenticular part." (ECF No. 59-2, '196 patent, 9:57-10:5.)[2]

A district court is required to make an "underlying factual inquiry," and without more I cannot conclude that a jury would be required to agree with Outlaw's opinion that excessive testing would be required in order to produce the invention. But, as with the written description requirement, the Defendants have come forward with enough evidence to create a genuine issue of material fact. Accordingly, both summary judgment motions will be denied.

3. Raymond Patent

The Defendants also argue that the '196 patent is invalid because of the injection molding activity conducted by Mark Raymond prior to NGI's application. Defendants assert that Raymond began developing a lenticular cup with a company called Waddington North America. By 1999, he had developed a process that produced cups lacking distortion or degradation, and ultimately they were judged to be of superior quality by a representative of an advertising agency for Pepsi.

a. Corroboration

NGI first argues that there is insufficient corroboration to satisfy the clear and convincing

[2]The Defendants also suggest that because NGI was not able to produce a polypropylene cup until 2004, long after the application was filed, that strongly suggests that the specification would not allow one skilled in the art to have been able to produce such a cup. NGI responds that there is no evidence that it tried, and *failed*, to use make a polypropylene cup prior to the application date; instead, it simply did not even try to make one. (It made other applications.) Thus, I agree with NGI that it cannot reasonably be inferred that the specification would not have provided enough information to create the invention claims.

standard of evidence. It argues that Raymond's own testimony is itself sketchy, highlighting the need for ample corroboration. The testing was done at Waddington, outside of Raymond's sight, and occurred over many years and in many iterations. Thus, Raymond explained that he did not know if he had been personally present for many of the trial runs. And, although he did produce a contemporaneous notebook, (ECF No. 141-12), corroboration must come from someone other than the inventor.

The Defendants argue, however, that this is not a case where an inventor is relying solely on hazy memories from the past. Instead, in addition to his own notes, Raymond actually filed a patent application on February 15, 2000, detailing his invention. And Raymond's notes, though handwritten and somewhat illegible, are not the kind of "back of the envelope" scribblings that provide only scant information. Instead, the notes detail Raymond's idea for "bonding lenses in an all-mold process for containers, cups . . . to form lenticular containers," which he described as the "holy grail" of lenticular printing. (ECF No. 141-12.) And, although Raymond might not be able to recall each cup that was produced during the testing runs, he was able to produce actual cups that were made contemporaneously with his alleged invention. The Defendants also point out that Raymond is no longer the owner of the '555 patent that eventually issued, and he has no financial interest in this lawsuit.

Courts addressing the corroboration requirement have explained that "adoption of the 'rule of reason' has not altered the requirement that evidence of corroboration must not depend solely on the inventor himself." *Reese v. Hurst,* 661 F.2d 1222, 1225 (C.C.P.A. 1981). "Independent corroboration may consist of testimony of a witness, other than the inventor, to the actual reduction to practice or it may consist of evidence of surrounding facts and circumstances independent of

information received from the inventor." *Id.* "The requirement of independent knowledge remains key to the corroboration inquiry." *Medichem, S.A. v. Rolabo, S.L.,* 437 F.3d 1157, 1170 (Fed. Cir. 2006). Here, although the Defendants might be correct that Raymond's "story" is "coherently and convincingly told," the fact remains that it is not corroborated by any independent sources. Accordingly, I conclude that the Raymond evidence is not sufficiently reliable, as a matter of law, to overcome the clear and convincing burden of proof.

IV. Pre-Press Patents

This court previously found, based on the Plaintiff's concessions, that the Defendants' current method, which they call the Pixalen method, does not infringe the Plaintiffs' pre-press patents. NGI contends, however, that the method the Defendants used before developing that method infringed at least claim 1 of the '808 patent.

The '808 patent describes a method of producing a multidimensional composite image. The method disclosed uses eight steps:

> creating a plurality of electronic frames
> ordering the frames
> rasterizing each frame
> compressing each frame
> converting the nonbinary pixels of the compressed frames to binary pixels
> interlacing the frames
> outputting the interlaced frames to an imaging device
> producing a lithographic separation from the imaging device

(ECF No. 151-32, '808 patent 2:1-16.)

The Defendants argue that their previous method, known as the Matrical method, did not meet all of the limitations of claim 1 of the '808 patent. In particular, their method did not create compressed frames. Instead of compressing the frames, the process uses uncompressed frames that

are layered in conjunction with a matrix.

NGI argues, however, that the term "compressing" can include any technique in which pixels are manipulated. But this question was resolved during the claim construction phase, in which the court concluded that "compressing each frame" meant "squeezing or pressing the frame such that the frame becomes smaller in at least one dimension." (ECF No. 88 at 5.) It is not enough simply to manipulate an image or its pixels—the frame must actually be compressed in order to meet the limitations of the claim. Thus, the Defendants' motion for summary judgment of non-infringement will be granted.

V. Conclusion

For the reasons given above, the Defendants' motion for summary judgment is **GRANTED** in part: the Defendants are entitled to judgment of non-infringement of the Pre-Press patents. The Defendants' motion is **DENIED** in all other respects. The Plaintiff's motion for summary judgment is **GRANTED** in part: Plaintiff is entitled to a judgment on infringement of the Corresponding Patents. The Plaintiff's motion is **DENIED** in all other respects. The clerk shall set the case on for a telephonic scheduling conference.

SO ORDERED this 22nd day of December, 2015.

/s William C. Griesbach
William C. Griesbach, Chief Judge
United States District Court